U.S. NUCLEAR REGULATORY COMMISSION

STANDARD REVIEW PLAN

OFFICE OF NUCLEAR REACTOR REGULATION

APPENDIX 8-B[*1] GENERAL AGENDA, STATION SITE VISITS

An important part of the review at the operating license stage is a site visit. It is preferable to have the site visit sometime before the completion of the drawing review. The purpose of the site visit is to supplement the review of the design based on the drawings and to evaluate the actual implementation of the design as installed at the site. The Regional Office ~~of Regulatory Operations~~[2] having jurisdiction over the plant under consideration should be notified ahead of time of the visit so that the regional inspectors can become familiar on a first-hand basis with findings that may require followup action. Since proper implementation of design is the ultimate goal of the technical review process, the importance of a site visit is self-evident. The following is a typical general agenda that may be used as a guide for developing a specific agenda for the plant under review.

1. Preliminary Discussions

    a. Unresolved items.
    b. Plant layout for touring.
    c. Special interest areas.

2. Control Room

    a. General layout.
    b. Diesel control board.
    c. Cabling in control room (separation, loading, etc.).
    d. Engineered safety feature initiation and bypass switch arrangements and status panels.
    e. Power system control and mimic panel.

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[*] Formerly part of SRP Section 7 Appendix 7B.

f. DC system monitoring and alarms.

3. Cable Runs and Cable Spreading Area

a. General layout.
b. Degree of separation.
c. Diverse wiring.
d. Tray or wireway density (percentage fill).
e. Fire detection and protection.
f. Penetrations and cable terminations.
g. Identification of cables and raceways.

4. Switchgear Rooms

a. General layout.
b. Physical and electrical separation of redundant units and incoming independent power supply circuits [e.g., onsite, offsite (preferred), alternate AC][3].
c. Potential for damage due to fire, missiles, etc.
d. Cable installation.
e. Fire protection.

5. Battery and Charger Installations

a. General layout.
b. Physical and electrical separation.
c. Potential for damage due to fire, missiles, etc.
d. Fire protection.
e. Ventilation protection.
f. Monitoring instrumentation and alarms.

6. Diesel Generators

a. General layout.
b. Physical and electrical separation of redundant units.
c. F~~ire~~uel[4] supply system.
d. Fire protection.
e. Diesel generator local control panel(s) and instruments and controls.
f. Auxiliary systems - starting air, combustion air, ventilation, engine cooling, etc.
g. Potential for damage and degradation due to flooding, missiles, dust, etc.

7. Instrument Piping[5]

a. Potential for damage due to fire, flooding, etc.

8. Switchyard

a. General layout.

b. Physical and electrical separation of transmission circuits, buses, breakers, and control circuits.
c. Relay house.
d. Control power supplies (AC and DC).
e. Potential for damage due to fire, missiles, etc.
f. Fire detection and protection.

9. Reactor Building

a. General layout.
b. Potential for cable damage due to fire, missiles, pipe breaks etc.
c. Separation of piping and cable to redundant equipment.

10. Turbine Building

a. General layout.
b. Turbine overspeed protection systems: instrumentation arrangement and layout.[6]
c. Provisions for testing overspeed protection system; turbine stop, control, intercept, and extraction steam valves.[7]
d. Potential for cable damage due to fire, missiles, pipe break, etc.
e. Turbine bypass system, general arrangement.[8]

11. Shared Systems for Multi-Unit Sites

a. Equipment location and potential for damage.
b. Control room control and assignment to accident unit.
c. Status information provided to all operators.
d. Availability upon completion of first unit.

12. Main Steam Lines[9]

a. Flow path below MSIVs - type of shutoff valves and source of control (local, control room, etc.).

13. Shutdown Outside Control Room

a. Remote shutdown panels arrangement, separation, and layout.
b. Potential for damage due to fire, missiles, etc.
c. Identification of control and monitoring equipment.

14. Relay Room

a. General layout.
b. Nuclear and reactor protection instrument cabinet arrangement, separation, and identification.
c. Potential for damage due to fire, missiles, etc.

15. ESF Systems and Pump Rooms

a. General layout.
b. Physical and electrical separation of redundant equipment.
c. Potential for damage due to fire, missiles, etc.
d. Cable and raceway layout.
e. Identification of cables, raceways, and equipment.

16. Vital Instrumentation Power Supply Installation

a. General layout.
b. Physical and electrical separation.
c. Potential for damage from fire, missiles, etc.
d. Monitoring instrumentation.
e. Cable and raceway layout.
f. Identification of cables, raceways, and equipment.

17. Alternate AC Source(s) for Station Blackout

a. General layout, including buildings housing generating unit(s) or portions thereof.
b. Fuel supply system.
c. Physical separation and electrical isolation (at interfaces with the onsite power system) of power circuits, buses, breakers, and control circuits from offsite and onsite power supplies.
d. Control power supplies.
e. Potential for damage due to fire, missiles, etc.
f. Control panel(s) and associated instruments and controls.
g. Auxiliary systems - starting air, combustion air, ventilation, engine cooling, etc.
h. Fire detection and protection.[10]

18. Plant Lighting System

a. General layout and arrangement including separation and isolation from Class 1E circuits and equipment where applicable.
b. Identification of cables, raceways, and equipment.
c. Lighting power supply arrangement in safety-related areas and access routes to/from such areas.
c. Equipment location and potential for damage.[11]

For combined license (COL) applications under 10 CFR Part 52, site visits may be conducted in conjunction with inspection activities rather than reviews of the application. The agenda for such site visits should appropriately reflect the design set forth in the safety analysis report, including inspections, tests, analysis, and acceptance criteria (ITAAC), site interface requirements, and combined license action items, to ensure that the licensee's implementation of the design is consistent with relevant regulatory requirements, inspection/review criteria, and commitments. SRP Section 14.3 (proposed) contains procedures for the review of site specific information, interface criteria, and ITAAC during the review of the license application.[12]

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SRP Draft Section visit

Attachment A - Proposed Changes in Order of Occurrence

Item numbers in the following table correspond to superscript numbers in the redline/strikeout copy of the draft SRP section.

Item	Source	Description
1.	Editorial	Added dash to numbering scheme for consistency with Appendix 8-A.
2.	Update to reflect current NRC organization	Revised to reflect that identification of the organization(s) discussed as the "Regional Office(s)" is now appropriate.
3.	Editorial	Added consideration of the separation and insolation between major power supplies, as appropriate, during the site visit. See SRP Sections 8.2 and 8.3.1 Areas of Review.
4.	Editorial	Revised to correct a typographical error.
5.	No change	Consideration should be given, if the PRB concurs, to deletion of this item as an agenda consideration based upon the fact that Electrical Engineering Branch (EELB) is not currently responsible for the review of instrument piping.
6.	No change	Consideration should be given, if the PRB concurs, to deletion of this item as an agenda consideration based upon the fact that Electrical Engineering Branch (EELB) is not currently responsible for the review of the turbine.
7.	No change	Consideration should be given, if the PRB concurs, to deletion of this item as an agenda consideration based upon the fact that Electrical Engineering Branch (EELB) is not currently responsible for the review of the turbine.
8.	No change	Consideration should be given, if the PRB concurs, to deletion of this item as an agenda consideration based upon the fact that Electrical Engineering Branch (EELB) is not currently responsible for the review of the turbine.
9.	No change	Consideration should be given, if the PRB concurs, to deletion of this item as an agenda consideration based upon the fact that Electrical Engineering Branch (EELB) is not currently responsible for the review of the main steam system.
10.	Current PRB responsibilities, See ROC 1453 for SRP Section 8.2	Added agenda items regarding alternate AC sources and plant lighting based upon current PRB review responsibilities of the Electrical Engineering Branch (EELB).

Item	Source	Description
11.	Current PRB responsibilities, See ROC 505 for SRP Section 9.5.3	Added agenda items regarding alternate AC sources and plant lighting based upon current PRB review responsibilities of the Electrical Engineering Branch (EELB).
12.	SRP-UDP Guidance, Implementation of 10 CFR 52	Added paragraph to address 10 CFR 52 reviews and inspections.

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Attachment B - Cross Reference of Integrated Impacts

Integrated Impact No.	Issue	SRP Subsections Affected
	No Impacts for this section.	